

## REMARKS

Claims 1 and 4-6 were pending and under consideration, claims 2-3 having been cancelled.

In the Office Action of September 7, 2006, claims 1 and 4-6 were rejected. Claims 1 and 4-6 were rejected and anticipated by Motohashi (US App 2004/0126622) under 35 USC 102(c). Claims 1 and 4-6 were rejected under 35 USC 102(f) as allegedly the invention of another. Claims 1 and 4-6 were rejected as anticipated by Motohashi II (US App 2005/02662273). Claims 1 and 4-6 were rejected under 35 USC 102(f) as allegedly the invention of another. Finally, claims 1 and 4-6 were rejected as obvious in view of Takai (USP 4770924) and Saito et al. (JP 2002-025033 or US App. 2002/0018918).

All of these rejections are traversed, particularly in view of the amendment presented above.

Additionally, new claim 7 has been added. Thus claims 1 and 4-7 are pending.

Regarding the amendment to claim 1, support for the 50 nm limit for the magnetic layer thickness can be found in Example 1, described in paragraph [0068] of the printed publication **20040166375**.

Regarding the amendment to claim 6, and the addition of new claim 7, support for the 25 nm limit for the magnetic layer thickness can be found in Example 2, described in paragraph [0071] of the printed publication **20040166375**.

It is submitted that the application makes clear that the preferred thickness of the magnetic layer is between 10 nm and 75 nm. However, applicants have demonstrated good results specifically for thickness of 25 nm and 50 nm. Thus, it is submitted that these claims are fully supported by the specification.

Regarding the rejections under 35 USC 102(e), applicants are submitting a certified English language translation of applicant's Japanese priority application JP2002-375122. The Japanese application was filed in Japan on December 25, 2002. Motohashi and Motohashi II have earliest effective filing dates of December 16, 2003 and thus are removed as prior art. Notice to that effect is requested. The certified translation will become available on or about March 15, 2007 at which time applicant's counsel will immediately forward same to the USPTO.

Regarding the rejections under 35 USC 102(f), the present invention and the Motohashi disclosures are directed to solving different problems and, consequently, the results are different. The goal of the Motohashi disclosures is to provide a magnetic tape in which the magnetic properties are kept stable. This is done in part by using a magnetic layer whose thickness

extends from 40 nm to 100 nm. In Motohashi paragraph [0095] it is explained that using a thickness lower than 40 nm results in poor coercivity.

In contrast, in Nagai, the present application, the aim of the invention is to provide a magnetic tape whose mechanical and physical properties are kept stable, i.e., the heat-shrinkage ratio and humidity expansion coefficient conditions. This is done in part by using a magnetic layer whose thickness is low. In the above amendment, this range is restricted to from 10 nm to less than 40 nm which is outside of the range that might be taught by the Motohashi disclosures. As such, Motohashi and Motohashi II do not teach the presently claimed subject matter and thus the presently claimed subject matter cannot fairly be said to have been invented by Motohashi.

Accordingly, it is submitted that the rejection under 35 USC 102(f) is improper and has been overcome.

Regarding the rejection under 35 USC 103, the amendment clearly makes the cited art inapplicable.

Takai discloses a magnetic tape have a double-layered magnetic structure, but nowhere discloses or suggest a magnetic layer in the range from 10 nm to less than 40 nm. Takai's magnetic layers range from 50 nm to 500 nm, preferably from 70 nm to 300 nm. See column 7, lines 22-25.

Saito et al. discloses the desirability of controlling the heat-shrinkage ratio, but only in the context of a magnetic disk. The underlying disks have material properties that are much different than those of tape supports, and the manufacturing methods are much different too. The issues relevant to the one cannot simply be translated to the other. For example, a disk must be rigid whilst tape must be flexible, and these properties must be maintained under different conditions. And with specific reference to the claims, the claims call for a non-magnetic support with a thickness of 4.0  $\mu\text{m}$  to 10.0  $\mu\text{m}$  so that the heat-shrinkage ratio and the humidity expansion coefficient satisfy the stated conditions. However, in Saito et al., the non-magnetic support must be 62  $\mu\text{m}$  in order to provide sufficient rigidity, etc.

Accordingly it is submitted that Takai and Saito et al. cannot be combined as proffered, and in any event, do not fairly result in or suggest the presently claimed subject matter. Therefore, the rejection under 35 USC 103 should be withdrawn. Notice to that effect is requested.

In view of the foregoing, it is submitted that claims 1 and 4-6 are patentable and that the application is in condition for allowance. Notice to that effect is requested.

Respectfully submitted,

Dated: March 6, 2007

By:           /David R. Metzger/            
David R. Metzger (Reg. No 32,919)  
SONNENSCHN NATH & ROSENTHAL  
P.O. Box 061080  
Wacker Drive Station - Sears Tower  
Chicago, Illinois 60606-1080  
Phone: (312) 876-8000